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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,632	10/18/2001	N. Kutry Nair	839-1060	7028

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08/29/2003

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EXAMINER

JOHNSON, JONATHAN J

ART UNIT

PAPER NUMBER

1725

DATE MAILED: 08/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n N .

09/981,632

Applicant(s)

NAIR ET AL.

Examin r

Jonathan Johnson

Art Unit

1725

-- The MAILING DATE of this c mmunication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 4-8 and 10-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-12 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 4-8 and 10-12 are drawn to a laser apparatus, classified in class 372, subclass various.
- II. Claims 1-3 and 9 are drawn to a method of cleaning machine components, classified in class 219, subclass 121.69.

The inventions are distinct, each from the other because of the following reasons:

Inventions Group II and Group I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus can be used to etch a design on a clean substrate.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Jeff Nelson on 8-19-03 a provisional election was made without traverse to prosecute the invention of Group II, claims 1-3 and 9. Affirmation of this election must be made by applicant in replying to this Office action. Claims 4-8 and 10-12 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Matthews et al. (5,986,234). With respect to Claim 1, Matthews et al. teach a method of cleaning a machine component using a laser beam (abstract) by programming a controller coupled to a laser source of the laser beam for controlling the laser source to perform laser ablation (Figure 7, Item 78 and column 12, lines 15-24); and directing the laser beam at the machine component surface for vaporizing surface contaminants and coatings deposited on said surface without changing base material properties of said machine component (column 2, lines 50-65 and Figure 8, beam).

With respect to Claim 2, the teachings of Matthews et al. are the same as relied upon in the rejection of Claim 1. Matthews et al. teach coupling the controller to a computer system having a processor and a database (column 12, lines 18-21); loading the database with machine component data and corresponding laser power related data for ablating surface contaminants or coatings from the surface (column 12, lines 15-24 and column 2, lines 50-57); providing a detector to monitor the ablation of surface contaminants or coatings (figure 8, item 86), and provide feedback data to the computer system (column 12, lines 15-20); comparing the feedback data with predetermined data to determine progress of ablation (column 12, lines 18-20); and controlling the laser source depending on the comparison step (column 12, lines 19-20).

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With respect to Claim 3, the teachings of Matthews et al. are the same as relied upon in the rejection of Claim 1. Matthews et al. teach disposing vapors generated during laser ablation (figure 8, item 90).

With respect to Claim 9, Matthews et al. teach a laser-based method for cleaning a machine component by controlling a laser source to apply a laser beam for performing laser ablation (column 12, lines 15-20); directing the laser beam towards a component surface for vaporizing surface contaminants or coatings deposited on the component surface without changing base material properties of the component (column 2, lines 60-65); communicatively coupling a computer system having a processor and a database to the controller (column 12, lines 10-25); loading the database with data related to the component and corresponding laser power related data for ablating contaminants and coatings from respective components (column 12, lines 19-22 and column 2, lines 50-55); monitoring ablation process of the component using a detector, the detector being disposed adjacent to the component (figure 7, item 76); receiving feedback data from the detector at the computer system (column 12, lines 10-25); comparing the feedback data with predetermined data in a comparator to determine progress of ablation (column 12, lines 10-25); and controlling the laser source depending on the comparison step (column 12, lines 10-25).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 703-308-0667.

The examiner can normally be reached on M-Th 7AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1495.



Jonathan Johnson  
Examiner  
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